

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/009689

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ C07D213/57, 213/79, 217/14, 215/12, C09K11/06, H05B33/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ C07D213/57, 213/79, 217/14, 215/12, C09K11/06, H05B33/14

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
CAPLUS (STN), REGISTRY (STN)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	US 2003/0040627 A1 (SANYO ELECTRIC CO.), 27. February, 2003 (27.02.03), Full text; particularly, Claims; formulas 45, 47; Par. No. [0033]; formulas 55, 56 & JP 2004-59433 A & CN 1397559 A	1-8 9-11
X Y	WO 02/15645 A1 (THE TRUSTEES OF PRINCETON UNIVERSITY), 21 February, 2002 (21.02.02), Full text; particularly, page 48, lines 3 to 10; page 16, lines 1 to 5; page 48, line 12 to page 49, line 4 & AU 2001083274 A5 & EP 1325671 A1 & JP 2004-506305 A	1-8, 11 9, 10

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
17 September, 2004 (17.09.04)Date of mailing of the international search report
12 October, 2004 (12.10.04)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/009689

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 11-354283 A (Idemitsu Kosan Co., Ltd.), 24 December, 1999 (24.12.99), Par. Nos. [0068] to [0078], [0059] to [0060]; & EP 949696 A2 & CN 1236825 A & US 6509109 B1	9,11
Y	JP 2003-173877 A (Matsushita Electric Works, Ltd.), 20 June, 2003 (20.06.03), Par. Nos. [0024], [0029] (Family: none)	9,11
Y	JP 2003-157981 A (Toyota Industries Corp.), 30 May, 2003 (30.05.03), Par. No. [0037] (Family: none)	10
Y	JP 2003-40873 A (Idemitsu Kosan Co., Ltd.), 13 February, 2003 (13.02.03), Par. Nos. [0024] to [0026] (Family: none)	10
P,X	US 2004/0086742 A1 (THE UNIVERSITY OF SOUTHERN CALIFORNIA), 06 May, 2004 (06.05.04), Full text; particularly, compounds 10, 11; Par. Nos. [0025], [0033] & WO 2004/016711 A1 & WO 2004/045000 A2 & US 2004/121184 A1	1,2,4,6-11
P,X	WO 03/084972 A1 (COVION ORGANIC SEMICONDUCTORS G.M.B.H), 16 October, 2003 (16.10.03), Full text; particularly, examples 1 to 4; page 19, line 21 to page 21, line 6 & DE 10215010 A1	1,2,4,7-11